

Remarks

The non-final Office Action dated March 17, 2009 indicated that: claims 6 and 8 are allowed; claims 1-5 and 7 are objected to due to informalities; claims 1-5 and 7 stand rejected under 35 U.S.C. § 112(1); claims 9 and 11 stand rejected under 35 U.S.C. § 103(a) over Ichihara (U.S. Patent No. 7,206,360) in view of Olson (U.S. Patent No. 7,0502,778); claim 1 stands rejected under 35 U.S.C. § 103(a) over the ‘360 reference in view of Birleson (U.S. Patent No. 6,177,964); claims 2-5 stand rejected under 35 U.S.C. § 103(a) over the ‘360 and ‘964 references and further in view of the ‘778 reference; claim 7 stands rejected under 35 U.S.C. § 103(a) over the ‘360, 964, and ‘778 references in view of Leenaert (U.S. Patent No. 6,999,745); and the drawings stand objected to. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

Applicant respectfully traverses the § 103(a) rejections because the cited combination of references lacks correspondence. For example, none of the asserted references teaches the claimed invention “as a whole” (§ 103(a)) including, *e.g.*, aspects of the claimed invention directed to making amplitude corrections during frequency translation. Because none of the references teaches these aspects, no reasonable combination of these references can provide correspondence. As such, the § 103 rejections fail.

More specifically, the Office Action has not cited any supporting discussion in the ‘360 reference which teaches that the cited amplitude detector carries out amplitude correction during any frequency translation. In fact, the purpose of the ‘360 reference teaches away from correction during demodulation, instead requiring that the amplitude deviation correction be carried out “after orthogonal demodulation” (see column 1 in the “Field of Invention”). Referring to the discussion of FIG. 1 at column 4:61 - 5:26, the cited rectifiers (51, 52) and correction (19) occur after demodulation (at demodulator 4) and are carried out on the respective I and Q signals (*i.e.*, after the signals have been filtered). In a failed attempt to maintain the rejections based on the ‘360 reference, the Office Action improperly compares portions of Applicant’s Figure 1 to the cited portions of the ‘360 reference instead of addressing the claimed invention as required. The Office Action’s assertions of correspondence to Applicant’s disclosure do not address the fact

that the ‘360 reference fails to teach making amplitude corrections during frequency translating (e.g., making amplitude corrections during demodulation by demodulator 4). The claimed invention clearly requires that amplitude corrections be carried out during frequency translation, for example, by providing feedback to the mixer-circuit (e.g., block 2 shown in Applicant’s Figure 2) that performs the frequency translation. Applicant notes that the ‘360 reference does not teach that correction circuit 19 provides any feedback to the demodulator 4. *See, e.g.*, Figure 1.

In addition, the § 103 rejections are further improper because the ‘360 reference teaches away from making amplitude corrections during frequency translation, and thus teaches away from the proposed combination. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main (‘360) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007) (“[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious.”). In this instance, the purpose of the ‘360 reference teaches away from correction during demodulation, instead requiring that the amplitude deviation correction be carried out “after orthogonal demodulation” (*see* column 1 in the “Field of Invention”). Thus, there is no motivation to modify the ‘360 reference to carry out correction during frequency translation because such a modification would undermine this purpose.

Applicant further traverses the § 103(a) rejection of claim 7 because the ‘745 reference does not qualify as prior art under § 103(a). Specifically, Applicant hereby invokes § 103(c) and alleges that the subject matter of the claimed invention and of the cited ‘745 reference “were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.” According to M.P.E.P. § 706.02, the rejection under 35 U.S.C. § 103(a) should be withdrawn because “(s)ubject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation

of assignment to the same person.” This portion of the M.P.E.P. goes on to state that such subject matter which was prior art under former 35 U.S.C. § 103 via 35 U.S.C. § 102(e) is now disqualified as prior art against the claimed invention.

The ‘745 reference appears to have been first published on May 8, 2003, and the instant application is entitled to priority dates of at least November 20, 2003 (via PCT/IB03/05412) and December 19, 2002 (via EP 02080396.1). Thus, Applicant assumes that the ‘745 reference has been asserted as prior art under § 102(e). The ‘745 reference and the instant application to Van Sinderen *et al.* were at all relevant times assigned to, or subject to an obligation of assignment to, Koninklijke Philips Electronics N.V, as is evidenced by the assignment for the ‘745 reference recorded at Reel/Frame 013659/0531, and the assignment for the instant application recorded at Reel/Frame 018085/0843. Therefore, Applicant submits that the ‘745 reference does not qualify as prior art by way of § 102(e) and § 103(c). Accordingly, the § 103(a) rejection of claim 7 is improper and must be withdrawn.

Applicant respectfully traverses the objection to claims 1-5 and 7. Regarding claim 1, Applicant submits that this claim correctly recites that the amplitude detector is connected to the mixer-circuit (*see, e.g.*, amplitude detector 6 connected to mixer circuit 2 in Applicant’s Figure 1). Applicant notes that the change suggested by the Office Action is illogical because there is no amplifier circuit recited in claim 1. Regarding claim 2, Applicant has amended this claim to recite that the amplifier-circuits are connected between the polyphase circuit and the at least two mixers. Thus, Applicant requests that the objection to claims 1-5 and 7 be withdrawn.

Applicant respectfully traverses the objection to the drawings because Applicant has already provided the Examiner with a detailed explanation regarding how the drawings support aspects directed to separating the audio and video signals. *See, e.g.*, the previous two Responses, hereby incorporated by reference in their entirety. Applicant once again directs the Examiner to exemplary paragraph 0041 of Applicant’s specification (the U.S.P.T.O.’s published version), which describes using two mixers/multipliers with a local oscillator signal, followed by one or more polyphase filters as an exemplary manner in which to provide such outputs. Paragraph 0041 also describes alternate embodiments directed to high-suppression using a full complex

mixer. That is, the mixer circuits as represented in the Figures 2 and 4, using an oscillatory signal, translate an input signal into a wanted and an unwanted (*i.e.*, video) signal, that can be suppressed using, for example, a polyphase filter, where the input signal can include audio/video information as discussed in paragraphs 0039-0040. Applicant notes that the Examiner continues to state that “the component that separates audio signal from the video signal” must be shown; however, no such language is present in the claims. Instead, the claims recite a mixer circuit and a polyphase filter, which are clearly illustrated in Applicant’s Figures 2 and 4. Thus, the objection to the drawings is improper and should be removed. Should the Examiner require further clarification, Applicant invites a telephone call to the undersigned. Moreover, should the Examiner maintain any objection to the drawings, Applicant respectfully requests that Examiner identify what features of the claims are allegedly not present in the drawings using the language recited in Applicant’s claims.

Applicant respectfully traverses the § 112(1) rejection of claims 1-5 and 7 because aspects of these claims directed to are fully supported by Applicant’s specification in compliance with the written description requirement as has been discussed in detail in the previous two Responses. In this instance, the Examiner has not met the initial burden of a thorough reading and evaluation of the application and has presented neither sufficient evidence nor sufficient analysis/reasons why a person skilled in the art would not recognize that the written description of the invention provides support for the claims.

See, e.g., M.P.E.P. § 2163. Instead, the rejection appears to be impermissibly based upon an assertion that the specification must recite word-for-word correspondence to the claim limitations. Applicant submits that word-for-word correspondence is not required by the M.P.E.P. or relevant law, and maintains that the figures, together with the discussion in the specification (*see, e.g.*, paragraphs 0039-0041), fully support the claim limitations. *See, e.g.*, *Union Oil Co. of California v. Atlantic Richfield Co.*, 208 F.3d 989 (Fed. Cir. 2000), *cert. denied*, 69 U.S.L.W. 3165 (Feb. 20, 2001) (No. 00-249) (quoting *In re Gosteli*, 872 F.2d 1008, 1012, 10 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1989) (“The written description requirement does not require the applicant “to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.””). In response to

Applicant's detailed explanation regarding support for the claims, the Examiner continues to simply conclude that there is no support without providing any evidence to rebut Applicant's position, as required. *See, e.g.*, M.P.E.P. § 2163. Accordingly, the § 112(1) rejection of claims 1-5 and 7 is improper and cannot be maintained.

In view of the remarks above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilska, of NXP Corporation at (408) 474-9063.

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131
CUSTOMER NO. 65913

By: 
Name: Robert J. Crawford
Reg. No.: 32,122
(NXPS.504PA)